

7

11. The device according to claim 7, wherein a material of the gate conductor is selected from the group comprising tantalum nitride (Ta<sub>2</sub>N<sub>3</sub>) and titanium nitride (TiN).

12. The device according to claim 7, wherein the gate conductor comprises a film having a thickness of about 2-4 nm.

13. The device according to claim 7, wherein the fully silicided material comprises a silicide that forms above about 550° C.

14. The device according to claim 7, wherein the fully silicided material comprises at least one of nickel (Ni), platinum (Pt), cobalt (Co), tungsten (W) and titanium (Ti).

15. The device according to claim 7, wherein a material of the gate conductor is determinative of a work function of the gate conductor independent of the fully silicided material.

16. A device, comprising:

a nanowire connecting first and second silicon-on-insulator (SOI) pads;

a gate conductor surrounding an entire length of the nanowire, the entire length of the nanowire being

8

defined as all upper, lower and side surfaces of the nanowire along the length of the nanowire; poly-Si surrounding the gate conductor; and silicide forming metal disposable for reaction with the poly-Si to thereby form a fully silicided (FUSI) material disposable to induce radial strain in the nanowire.

17. The device according to claim 16, wherein a material of the gate conductor is selected from the group comprising tantalum nitride (Ta<sub>2</sub>N<sub>3</sub>) and titanium nitride (TiN).

18. The device according to claim 16, wherein the gate conductor comprises a film having a thickness of about 2-4 nm.

19. The device according to claim 16, wherein the fully silicided material comprises a silicide that forms above about 550° C.

20. The device according to claim 16, wherein the fully silicided material comprises at least one of nickel (Ni), platinum (Pt), cobalt (Co), tungsten (W) and titanium (Ti).

\* \* \* \* \*